KS Electric Transmission Authority
KETA

Framework for Considering a Notice to Proceed With Construction
July 25, 2007

Identify the projects and current cost estimates.

- Spearville – Reno 345 kV* $82 million
- Spearville – Knoll 345 kV $87 million
- Spearville – Knoll – Axtell 345 kV $186 million

*Spearville – Wichita 345 kV is considered the functional and cost equivalent to Spearville – Reno 345 kV

Identify the types of benefits and their associated values as calculated by the SPP. Assume 40 years of analysis using a 6% discount rate, KETA's estimated borrowing cost.

SPP analyzed and included savings related to Dispatch Savings and Violation Savings.

- Spearville – Reno 345 kV $82.8 million
- Spearville – Knoll 345 kV $66.4 million
- Spearville – Knoll – Axtell 345 kV $193.3 million

The Spearville-Knoll-Axtell line was identified as the most economically viable of the three lines examined because the anticipated savings in these two categories exceed, by $7 million, the anticipated cost. However, other categories of cost savings to entities that would be served by these lines and indirect benefits were not factored in to the SPP analysis.

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SPP analyzed but did not include Generator Benefits.

- Spearville – Reno 2010 annual benefit $5.9 million
  2020 annual benefit $981,000

- Spearville – Knoll – Axtell 2010 annual benefit $3.3 million
  2020 annual benefit $1.1 million

  (Spearville – Knoll was not separately analyzed.)

Generator benefits would likely accrue directly to the owners of the generators.

SPP has identified the value of a one-year deferral in the X-Plan for two projects.

- Spearville – Knoll $12 million

- Spearville – Knoll – Axtell $1.6 million

- Spearville – Reno not quantified

Since the Spearville – Reno project has been identified by the SPP as being more negatively impacted by the X-Plan than Spearville – Knoll – Axtell, it is reasonable to assume the value of deferral for Spearville – Reno to be significantly higher than the values quantified above.

SPP identified but did not analyze the savings potential for unit recommitment BETWEEN transmission zones. The analysis only reflects dispatch savings within each zone.

- e.g. the ability of new transmission facilities to more efficiently dispatch generating facilities of Kansas utilities AS A GROUP has not been analyzed. There are significant cost differences for generation between

utilities serving Kansas customers.

SPP recognizes potential reliability benefits to these projects, but claims their value is minimal and should be ignored to the extent other parties have already committed to reliability projects that could now be deferred. This analysis will accept SPP's assertions and reasoning.

SPP has identified but not analyzed as a benefit the economic value of wind energy transmitted. The analysis assumes no costs for this energy.

- In 2010 the SPP study assumes an additional 780 MW of wind capacity in Kansas. In 2020, 1,840 MW have been cumulatively added.

- 1,500 MW of wind capacity is assumed to exist in Texas CREZ.

- At a conservative 30% capacity factor (to allow for occasional transmission curtailments), 1,840 MW of new Kansas wind generation would generate 4.8 million MWH annually. **Transmission revenues from wind projects would be derived from several potential sources:**
  1. For wind generation not designated as a network resource, firm or non-firm point to point transmission service revenues would be generated moving the power from the wind generation to the off-takers load.
  2. Wind generation designated as a network resource would generate transmission revenues under the Network Integrated Transmission Service (NITS) tariff. Due to the intermittent nature of wind as a generation resource approximately only 10% of the power would qualify for this transmission service. SPP has advised KETA that they believe these revenues would be in the several million dollar range annually based on the study assumptions.
  3. The remaining approximately 90% of the power generated from the wind resources designated as a network resource would be moved under some other form of transmission service (such as daily firm or non-firm).

- There is additional transmission revenue related to Texas CREZ energy, but those benefits are harder to tie to these lines and provide no other Kansas benefits. They will not be quantified in this threshold analysis.

There are other potential renewable energy benefits. These benefits would not normally provide a transmission revenue stream. They do, however, "expand the Kansas economy", one of the stated objectives for forming KETA.

- Revenue from the sale of Renewable Energy Credits (REC's) or the functional equivalent in terms of saved costs for purchasing emissions credits. This revenue would go either to the owners of wind projects or to the energy offtakers as determined by contract.

- Local economic development benefits.

- CO2 offset benefit. This would normally be claimed by the energy offtakers, who would otherwise utilize energy generated from fossil fuels.

No direct analysis of the expected impact of these projects on retail rates has been performed. One can infer savings related to more efficient dispatch of units between transmission zones and violation cost savings.

Comments from the SPP Study report of April 2007 (p. 13)

> "SPP believes the results of this analysis to be very conservative. The analysis did not attempt to capture the benefit to load in Kansas."
>
> "…the true benefits across the entire study region would be significantly greater than stated in this study."

CONCLUSION

A strong threshold case can be made for issuance of Notices to Proceed with construction of any or all of these three line segments. SPP has identified savings which, by themselves, pay for the cost of the new lines. But SPP itself has termed the analysis "very conservative". Savings related to generator benefits, unit recommitment between transmission zones and transmission revenue from new wind-generated energy would significantly improve the overall benefit/cost ratios. There are probable rate benefits. Deferrals in the X-Plan, while not desirable, are possible and improve the economics even further.

Since SPP completed its analysis for KETA, ITC Great Plains, LLC has issued a press release and signed a commitment letter to SPP signaling its intent to construct and operate a 345 kV transmission line from Spearville to a newly constructed substation in Comanche County, Kansas and on to an interconnection with Westar in the vicinity of Wichita. This line may capture even more benefits than the Spearville-Reno line, and eliminate the need for that line.

KETA's charter does not contemplate a "very conservative" approach that ignores known benefits. It expressly urges KETA to make "improvements in the state's electric transmission infrastructure" based upon full consideration of benefits to "the Kansas economy". Conventional utility analysis, particularly as reflected in the SPP study, looks at costs and benefits to existing transmission owners and their existing portfolio of energy resources. KETA's analysis can cross these utility boundaries to capture benefits to Kansas as a whole. Further, KETA can and should determine benefits from a public finance perspective. Infrastructure improvements such as highways and water supply systems provide benefits far beyond the time horizon considered by for-profit entities, and at a lower cost of money.

KETA is in a position to vote on a Motion to issue a Notice to Proceed with construction of the Spearville-Knoll-Axtell line at its meeting on July 25, 2007.

Should KETA issue a Notice, it will next have to decide how to evaluate a commitment by a "private entity" to "perform the acts, finance and construct the

facilities or provide the services described in the notice", in the words of KETA's enabling statute. Alternatively, should no utility step forward during the 90-day waiting period, KETA would need to determine its next steps with respect to construction. KETA may decide to begin using its $1 million of project development budget authority to refine the SPP analysis and this threshold analysis. This work could be conducted in parallel with preliminary project engineering and siting.

This document, after review and approval by the Board, could be posted on the KETA website to assist private entities in evaluating whether to proceed with a project specified in a Notice.